

**LONG-CHAIN POLYUNSATURATED FATTY ACID OIL AND  
COMPOSITIONS AND PREPARATION PROCESS FOR THE SAME**

Abstract

Stable oil containing long-chain polyunsaturated essential fatty acids (LC-PUFAs) in the form of triacylglycerols, in particular arachidonic acid (ARA), dihomogammalinolenic acid (DHGLA), docosahexaenoic acid (DHA) or eicosapentaenoic acid (EPA). Such an oil may be prepared by bringing a carrier oil into contact with a biomass obtained from the culture of a microorganism, in particular a fungus or a microalga containing the acids ARA, DHGLA, DHA or EPA. These oils can be incorporated into the composition of a foodstuff, of a cosmetic or pharmaceutical product.